



Name: M. Umair Farooq | Class Subject:

Chemistry

Time Remaining: 45/45 (Minutes)

Q.1**Test 1 Introduction to Fundamental chemistry****Chemistry Unit Wise**

Which of the following statements about 12 g sample of C-12 is incorrect?

- A) The number of C-atoms is 6.022×10^{23}
- B) The number of C-atoms is the same as number of the atoms in 4.0 g of 4_2He
- C) The number of C-atoms is the same as electrons in 1.0 g of H₂
- D) The number of C-atoms is the same as electrons in 16.0 g of $^{32}_{16}S$

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Correct Answer:

- A
- B
- C
- D

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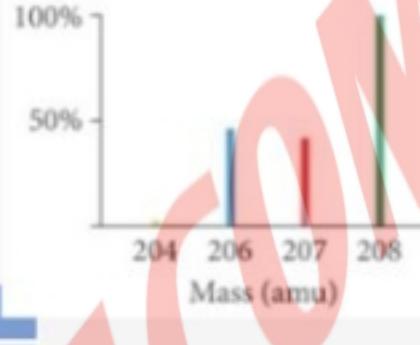
Time Remaining: 44/45 (Minutes)

Q.2

Test 1 Introduction to Fundamental chemistry

Chemistry Unit Wise

The mass spectrum of lead is shown. What quantities are represented by x-axis and y-axis?



Options	x-axis	y-axis
A)	Mass number	Relative abundance
B)	Mass number	Atomic number
C)	Atomic number	Height of peak
D)	Atomic number	Mass number

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Correct Answer:

A B C D

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Time Remaining: 44/45 (Minutes)

Q.3

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Isotopes of an element possess:

- a. Same physical and chemical properties
- b. Different physical and chemical properties
- c. Same physical but different chemical properties
- d. Same chemical but different physical properties

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 44/45 (Minutes)

Q.4

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

When lime stone (CaCO_3) is roasted, quicklime (CaO) is produced according to the following equation. The actual yield of CaO is 0.5kg when 1kg of limestone is roasted. What is the percentage yield of this reaction?



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Correct Answer:

A B C D

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Time Remaining: 44/45 (Minutes)

Q.5

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Which of the following statement is correct:

- a. The no. of negative ions having group of atoms is less common
- b. The properties of an element mostly corresponded to the most abundant isotope of that element
- c. Elements with odd atomic number process more than two isotopes
- d. The current strength of each isotope of an element gives mass no.

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Correct Answer:

A B C D

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Time Remaining: 44/45 (Minutes)

Q.6

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

A sample in the ionization chamber of mass spectrometer is ionized by:

- A) Electrons
- B) Proton
- C) neutron
- D) nucleus

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 44/45 (Minutes)

Q.7

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

One mole of CO_2 contains:

- a. $6.022 \times 10^{23} \times 2$ atoms of oxygen
- b. 22-moles electrons
- c. 6.022×10^{23} atoms of carbon
- d. Both b and c

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Correct Answer:

A B C D

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Time Remaining: 44/45 (Minutes)

Q.8

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Total number of atoms present in 49.0g H₂SO₄ are:

- A) $7 \times 6.022 \times 10^{23}$ number of atoms
- B) $7 \times 3.011 \times 10^{23}$ number of atoms
- C) It contains 1g molecules of H₂SO₄
- D) It contains 0.6g atoms of H₂SO₄

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 44/45 (Minutes)

Q.9

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Mass spectrum is obtained by plotting graph between:

- a. m/e along ordinate and relative number of ions along abscissa
- b. m/e along x-axis and relative number of ions along y-axis
- c. relative atomic mass along x-axis and m/e along y-axis
- d. none of the above

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Correct Answer:

A

B

C

D

Next

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Time Remaining: 43/45 (Minutes)

Q.10

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

The number of moles of CO_2 which contains 16 g of oxygen is

- a. 0.25
- b. 0.75
- c. 1
- d. 0.5

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 43/45 (Minutes)

Q.11

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Which one of the following is not generally same for one mole of different gases at STP?

- a. Volume
- b. Number of molecules
- c. Molecular mass
- d. all of them.

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Correct Answer:

A B C D

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Time Remaining: 43/45 (Minutes)

Q.12

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

4g H_2 reacts with 32.0g O_2 to produce water. Which of the following statements is correct?

- A) H_2 -limiting reactant
- B) O_2 -non-limiting reactant
- C) 2.0 mole water is produced
- D) 1 mole water is produced.

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 43/45 (Minutes)

Q.13

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

- Which of the following is correct sequence of processes involved in modern mass spectrometer?
- A) Vaporization, ionization, electric field, amplification, recording, ion collector, magnetic field.
 - B) Ionization, electric field, ion collector, vaporization ion collector, recording, amplification.
 - C) Vaporization, -ionization, electric field , magnetic field, ion collector, amplification and recording.
 - D) all of them

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Correct Answer:

A B C D

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Time Remaining: 43/45 (Minutes)

Q.14

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

The volume occupied by 1.6g of O_2 at STP is:

- a. $2.24dm^3$
- b. $22.4dm^3$
- c. $1.12dm^3$
- d. $112dm^3$

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 43/45 (Minutes)

Q.15

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Which of the following statements is incorrect for isotopes of an element?

- A) They have different position in the modern periodic table
- B) They have different mass number
- C) They have different physical properties
- D) They have different half-life

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Correct Answer:

A B C D

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Time Remaining: 43/45 (Minutes)

Q.16

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

The electrometer is also called as:

- A) Ion producer
- B) ion separator
- C) ion collector
- D) All of given

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 43/45 (Minutes)

Q.17

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Which information obtained from electrometer gives the relative abundance of ions of a definite m/e value?

- A) Direction of flow of electric current
- B) Strength of electric current
- C) Both strength and direction of flow of electric current
- D) All of given

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 42/45 (Minutes)

Q.18

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

The combustion analysis of an organic compound shows 60% carbon, 8% hydrogen and 32% oxygen. If the molecular mass of the given organic compound is 200, then the molecular formula of the organic compound is (Ar of C = 12amu, H = 1 amu and O = 16amu)

- A) $C_{10}H_{16}O_4$ B) $C_8H_{16}O_4$
C) $C_{16}H_{14}O_4$ D) $C_5H_8O_2$

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Correct Answer:

- A B C D

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Time Remaining: 42/45 (Minutes)

Q.19

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Which represent the simple ratio of atoms present in a compound?

- a. Molecular formula
- b. formula unit
- c. Gravimetric analysis
- d. Physical analysis

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Correct Answer:

A B C D

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Time Remaining: 42/45 (Minutes)

Q.20

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Which of the following contains one mole of the stated particles?

- A) Chlorine molecules in 35.5g of Cl_2 gas
- B) Electrons in 1g of hydrogen gas
- C) H^+ ions in 1dm³ of 1 mole dm⁻³ of aqueous solution of H_2SO_4
- D) Oxygen atoms in 22.4 dm³ of oxygen gas at STP

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 42/45 (Minutes)

Q.21

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Total number of atoms present in 17g of hydrogen peroxide is ($N = 6.02 \times 10^{23}$):

- A) 1.2×10^{24}
- B) 1.8×10^{25}
- C) 6.02×10^{23}
- D) 1.6×10^{26}

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Correct Answer:

- A
- B
- C
- D

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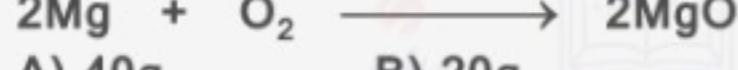
Q.22

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

0.5 mole of magnesium is burnt in excess oxygen. How much amount of MgO is produced in this reaction

(Mg = 24amu, O = 16amu)



- A) 40g B) 20g
C) 30g D) 15g

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Correct Answer:

- A B C D

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Chemistry

Time Remaining: 42/45 (Minutes)

Q.23

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Which one of the following is a CO_2 absorber?

- a. NaOH
- b. KOH
- c. $Ca(OH)_2$
- d. $MgCl_2$

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 42/45 (Minutes)

Q.24

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Which one of the following is not a water absorber?

- A) conc H_2SO_4
- B) Anhydrous $CuSO_4$
- C) $CaCO_3$
- D) $Mg(ClO_4)_2$



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Correct Answer:

- A
- B
- C
- D

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Chemistry

Time Remaining: 41/45 (Minutes)

Q.25

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Which one of the following compound doesn't have same molecular and empirical formula?

- a. CH_3COOH
- b. $C_{12}H_{22}O_{11}$
- c. $CH_3 - CH_2 - OH$
- d. $CH_3 - CH_2 - CHO$

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Correct Answer:

A B C D

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Time Remaining: 41/45 (Minutes)

Q.26

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

For those compounds which have same molecular and empirical formula, the value of simple multiple 'n' is?

- a. 2
- b. 4
- c. 1
- d. 3

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 41/45 (Minutes)

Q.27

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

The value of simple multiple 'n' is:

- a. The ratio of atomic mass and molecular mass
- b. The ratio of molecular mass and empirical mass
- c. The ratio of empirical mass and molecular mass
- d. The ratio of molecular mass and atomic mass

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Correct Answer:

A B C D

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Time Remaining: 41/45 (Minutes)

Q.28

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

One gram molecular mass of different substances expressed in grams must possess:

- a. Have different masses in them
- b. have same masses in them
- c. Some times same masses and some times different masses in them
- d. All given above

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Correct Answer:

A B C D

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Time Remaining: 41/45 (Minutes)

Q.29

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

One mole of different compounds has:

- A) different masses and different number of molecules
- B) same masses but different number of molecules
- C) different masses but same number of molecules
- D) same masses as well as same number of molecules

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Correct Answer:

- A
- B
- C
- D

Next

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Time Remaining: 41/45 (Minutes)

Q.30

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Which one of the following statement is not true about molecule?

- a. molecule can exist independently
- b. molecule is the largest particle of a pure substance
- c. molecule always consist of more than one atoms
- d. molecular size depends on number of atoms and shape of molecule

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Correct Answer:

A B C D

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Chemistry

Time Remaining: 40/45 (Minutes)

Q.31

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Molar volumes is 22.414dm^3 it is true:

- a. only when the gas is ideal
- b. only when the gas is non-ideal
- c. for ideal gas as well as for non-ideal gas
- d. sometimes true for ideal gas and some time true for non ideal gas

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 40/45 (Minutes)

Q.32

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

One mole of an ideal at room temperature and pressure (r.t.p.) occupies a volume of:

- a. $22dm^3$
- b. $20dm^3$
- c. $24dm^3$
- d. $26dm^3$

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Correct Answer:

A B C D

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Time Remaining: 40/45 (Minutes)

Q.33

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

414 dm^3 of each gas at STP has :

- a. a same mass and same numbers of molecules
- b. a different mass and different numbers of molecules
- c. a different mass but the same number of molecules
- d. a same mass but different number of molecules

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Correct Answer:

A B C D

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Time Remaining: 40/45 (Minutes)

Q.34

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

Many elements have fractional atomic masses. This is because:

- a. The mass of the atom is itself fractional
- b. Atomic masses are average masses of isobars
- c. Atomic masses are average masses of isotopes
- d. Atomic masses are average masses of isotopes proportion to their relative abundance

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 40/45 (Minutes)

Q.35

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

For a reaction $X + 2Y \longrightarrow Z$. The amount of Z formed by starting the reaction with 5 moles of X and 8 moles of Y:

- A) 5 moles
- B) 8 moles
- C) 16 moles
- D) 4 moles

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 40/45 (Minutes)

Q.36

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

One mole of water and one mole of methane have an equal:

- A) mass
- B) number of atoms
- C) number of molecules
- D) number of formula units

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Correct Answer:

- A
- B
- C
- D

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Chemistry

Time Remaining: 40/45 (Minutes)

Q.37

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

A compound has an empirical formula CH_2Cl , and molecular formula mass as 99gmol^{-1} , identify the compound,

- A) $\text{C}_2\text{H}_5\text{Cl}$
- B) $\text{C}_4\text{H}_8\text{Cl}$
- C) $\text{C}_2\text{H}_4\text{Cl}_2$
- D) $\text{C}_2\text{H}_3\text{Cl}_3$

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Correct Answer:

- A
- B
- C
- D

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Time Remaining: 39/45 (Minutes)

Q.38

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

The Avogadro's Number is the number of:

- a. numbers of the molecules of H_2 in 1 gram
- b. number of the molecules of CO_2 in 44 grams
- c. number of atoms in CO_2 in 44 grams
- d. number of oxygen atoms in CO_2 in 44 grams

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Correct Answer:

A B C D

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Time Remaining: 39/45 (Minutes)

Q.39

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

The empirical formula of a compound is CH_2O . What other information is needed to determine its molecular formula?

- a. %age composition of each element in compound
- b. density of the compound
- c. relative molecular mass of the compound
- d. boiling point of the compound

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Correct Answer:

A B C D

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Time Remaining: 39/45 (Minutes)

Q.40

Test 1 Introduction to
Fundamental chemistry

Chemistry Unit Wise

100g of $CaCO_3$ is decomposed, the CO_2 produced occupies a volume at STP.

- a. 2.2414 dm^3
- b. 22.414 dm^3
- c. 22414 dm^3
- d. 224014 dm^3

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Correct Answer:

- A
- B
- C
- D

Submit Quiz

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1.

Which of the following statements about 12 g sample of C-12 is incorrect?

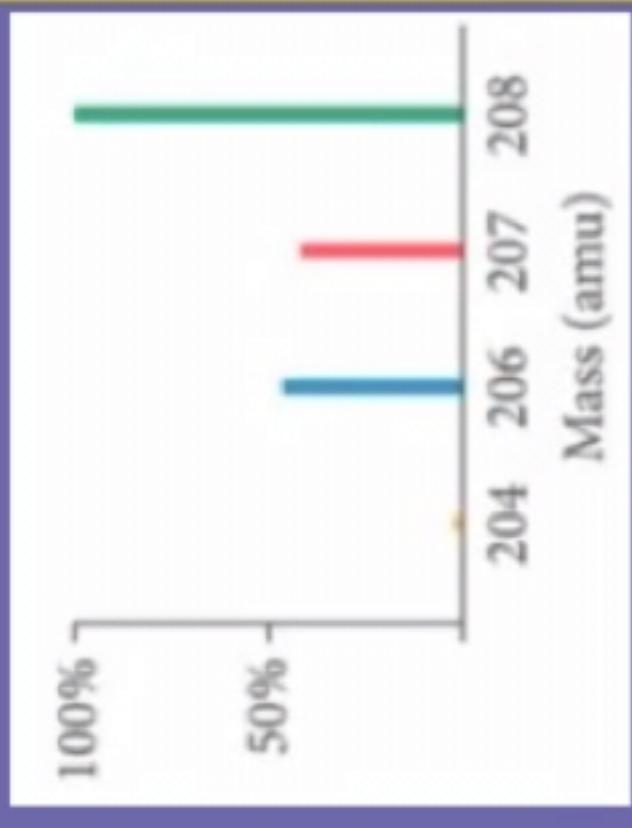
- A) The number of C-atoms is 6.022×10^{23}
- B) The number of C-atoms is the same as number of the atoms in 4.0 g of 4_2He
- C) The number of C-atoms is the same as electrons in 1.0 g of H₂
- D) The number of C-atoms is the same as electrons in 16.0 g of $^{32}_{16}S$

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2.

The mass spectrum of lead is shown

What quantities are represented by x-axis and y-axis?



Options	x-axis	y-axis
A)	Mass number	Relative abundance
B)	Mass number	Atomic number
C)	Atomic number	Height of peak
D)	Atomic number	Mass number

3.

1. Isotopes of an element possess:

- a. Same physical and chemical properties
- b. Different physical and chemical properties
- c. Same physical but different chemical properties
- d. Same chemical but different physical properties

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4.

When lime stone (CaCO_3) is roasted, quicklime (CaO) is produced according to the following equation. The actual yield of CaO is 0.5kg when 1kg of limestone is roasted. What is the percentage yield of this reaction?



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5.

Which of the following statement is correct:

- a. The no. of negative ions having group of atoms is less common
- b. The properties of an element mostly corresponded to the most abundant isotope of that element
- c. Elements with odd atomic number process more than two isotopes
- d. The current strength of each isotope of an element gives mass no.

6.

A sample in the ionization chamber of mass spectrometer is ionized by:

- A) Electrons
- B) Proton
- C) neutron
- D) nucleus

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7.

One mole of CO_2 contains:

- a. $6.022 \times 10^{23} \times 2$ atoms of oxygen
- b. 22-moles electrons
- c. 6.022×10^{23} atoms of carbon
- d. Both b and c

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8.

Total number of atoms present in H_2SO_4 are:

- A) $7 \times 6.022 \times 10^{23}$ number of atoms
- B) $7 \times 3.011 \times 10^{23}$ number of atoms
- C) It contains 1g molecules of H_2SO_4
- D) It contains 0.6g atoms of H_2SO_4

9.

1. Mass spectrum is obtained by plotting graph between:

- a. m/e along ordinate and relative number of ions along abscissa
- b. m/e along x-axis and relative number of ions along y-axis
- c. relative atomic mass along x-axis and m/e along y-axis
- d. none of the above

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10.

The number of moles of CO_2 which contains 16 g of oxygen is

d. 0.5

c. 1

b. 0.75

a. 0.25

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11.

Which one of the following is not generally same for one mole of different gases at STP?

- a. Volume
- b. Number of molecules
- c. Molecular mass
- d. all of them.

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12.

4g H_2 reacts with 32.0g O_2 to produce water.
Which of the following statements is correct?

- A) H_2 -limiting reactant
- B) O_2 -non-limiting reactant
- C) 2.0 mole water is produced
- D) 1 mole water is produced.

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جعفری

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13.

Which of the following is correct sequence of processes involved in modern mass spectrometer?

- A) Vaporization, ionization, electric field, amplification, recording, ion collector, magnetic field.
- B) Ionization, electric field, ion collector, vaporization ion collector, recording, amplification.
- C) Vaporization, -ionization, electric field, magnetic field, ion collector, amplification and recording.
- D) all of them

14.

The volume occupied by 1.6g of O_2 at STP is:

- a. $2.24dm^3$
- b. $22.4dm^3$
- c. $1.12dm^3$
- d. $112dm^3$

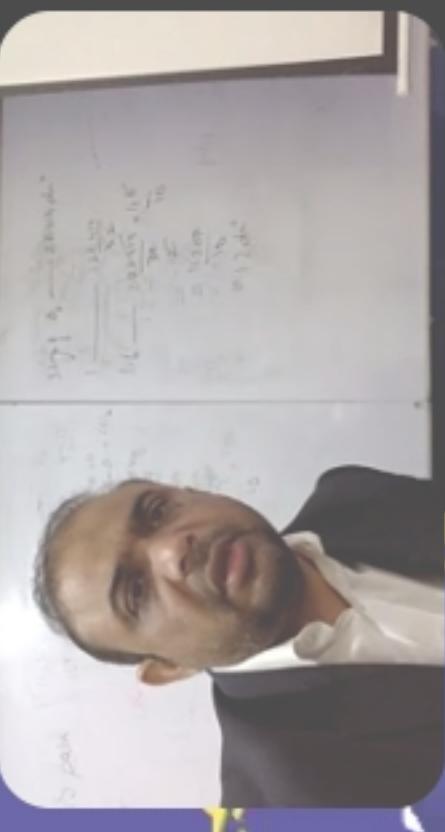
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15.

Which of the following statements is incorrect for isotopes of an element?

- A) They have different position in the modern periodic table
- B) They have different mass number
- C) They have different physical properties
- D) They have different half-life

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Q 16. What is called as:
The electronic converter
A) Ion separator
B) Ion collector
C) Ion protector
D) Ion current

- A) Ion separator
- B) Ion collector
- C) Ion protector
- D) Ion current

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17.

Which information obtained from electrometer gives the relative abundance of ions of a definite m/e value?

- A) Direction of flow of electric current
- B) Strength of electric current
- C) Both strength and direction of flow of electric current
- D) All of given

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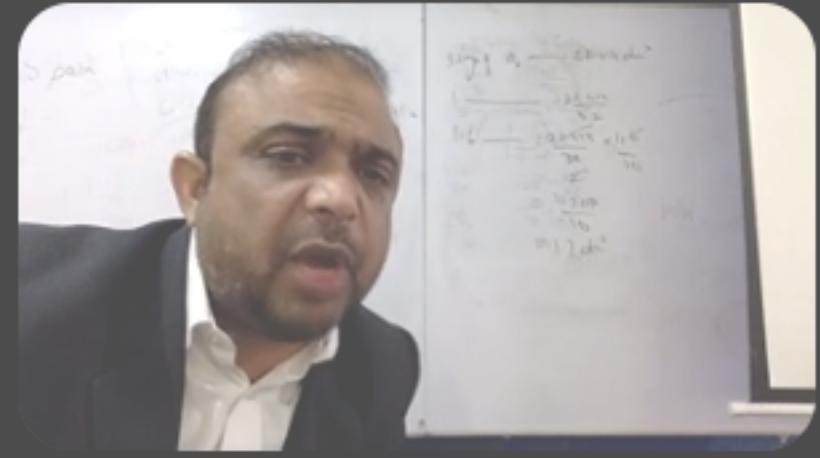
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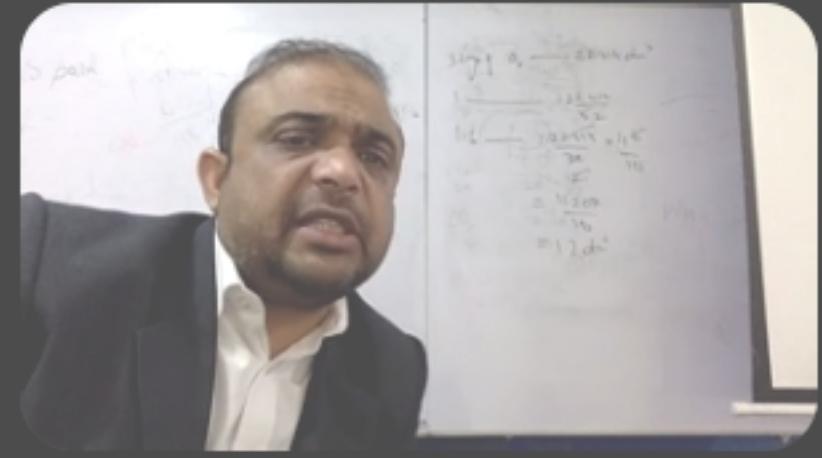
18.

The combustion analysis of an organic compound shows 60% carbon, 8% hydrogen and 32% oxygen. If the molecular mass of the given organic compound is 200, then the molecular formula of the organic compound is (Ar of C = 12amu, H = 1 amu and O = 16amu)

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C) $C_{16}H_{14}O_4$ D) $C_5H_8O_2$

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19.

Which represent the simple ratio of atoms present in a compound?

- a. Molecular formula
 - b. formula unit
 - c. Gravimetric analysis
 - d. Physical analysis

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20.

Which of the following contains one mole of the stated particles?

- A) Chlorine molecules in 35.5g of Cl_2 gas
 - B) Electrons in 1g of hydrogen gas**
 - C) H^+ ions in 1dm³ of 1 mole dm⁻³ of aqueous solution of H_2SO_4
 - D) Oxygen atoms in 22.4 dm³ of oxygen gas at STP

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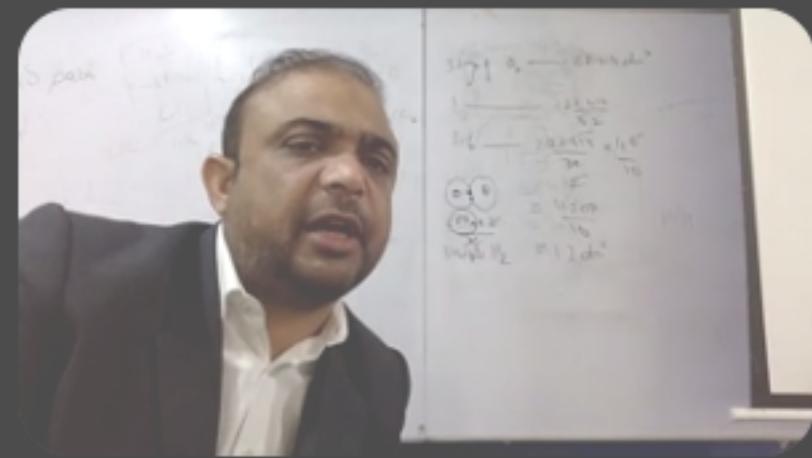
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21.

Total number of atoms present in 17g of hydrogen peroxide is ($N = 6.02 \times 10^{23}$):

- A) 1.2×10^{24} B) 1.8×10^{25}
C) 6.02×10^{23} D) 1.6×10^{26}

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Unmute



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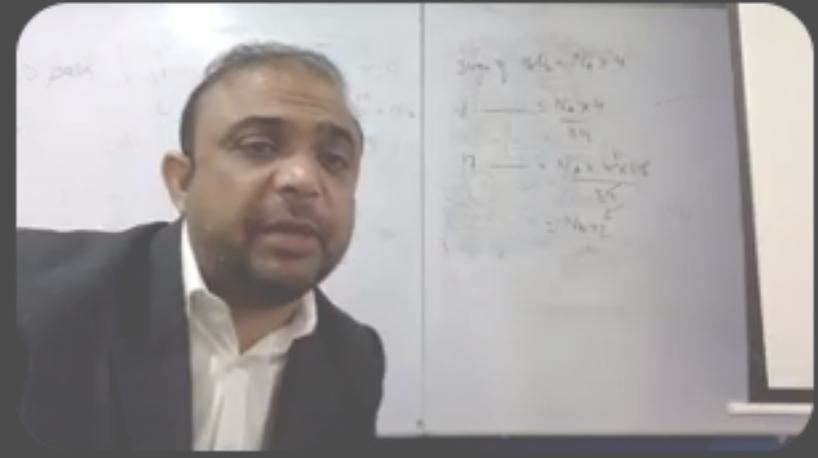
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22.

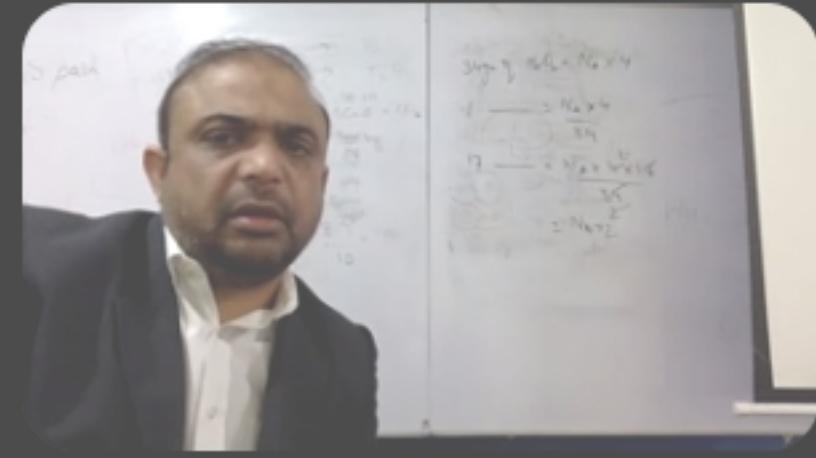
0.5 mole of magnesium is burnt in excess oxygen. How much amount of MgO is produced in this reaction

(Mg = 24amu, O = 16amu)



- A) 40g
 - B) 20g
 - C) 30g
 - D) 15g

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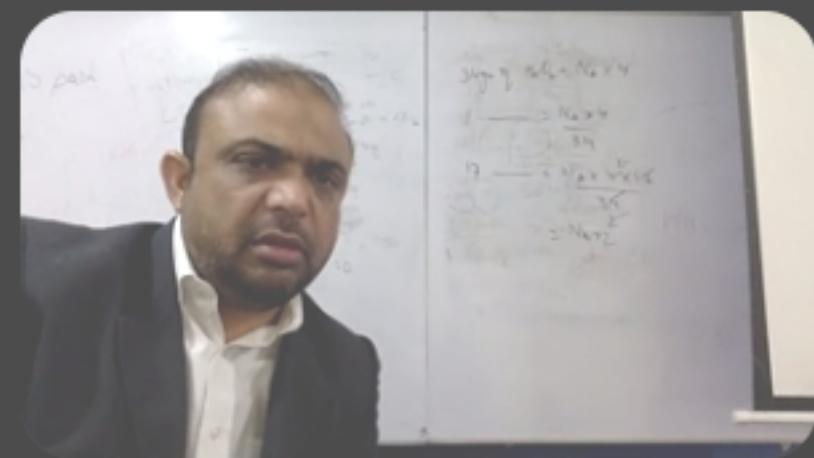
23.

1. Which one of the following is a CO_2 absorber?

- a. NaOH
 - b. KOH**
 - c. Ca(OH)₂
 - d. MgCl₂

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24.

Which one of the following is not a water absorber?

- A) conc H_2SO_4
- B) Anhydrous $CuSO_4$
- C) $CaCO_3$
- D) Mg (ClO_4)₂

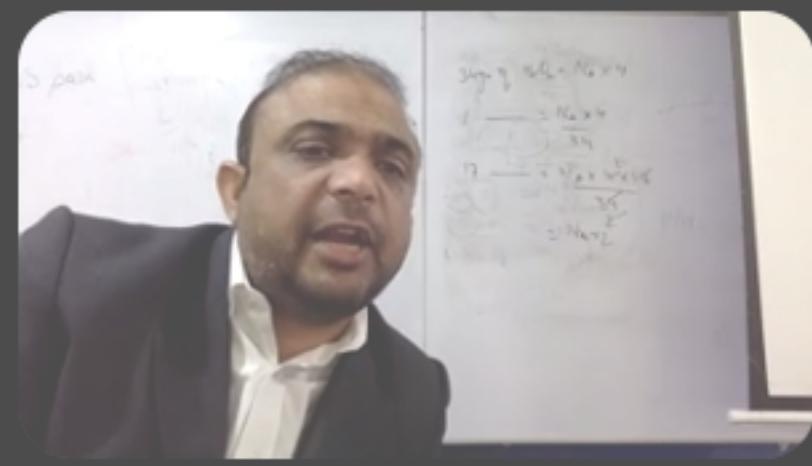
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25.

Which one of the following compound doesn't have same molecular and empirical formula?

- a. CH_3COOH
- b. $\text{C}_{12}\text{H}_{22}\text{O}_{11}$
- c. $\text{CH}_3 - \text{CH}_2 - \text{OH}$
- d. $\text{CH}_3 - \text{CH}_2 - \text{CHO}$

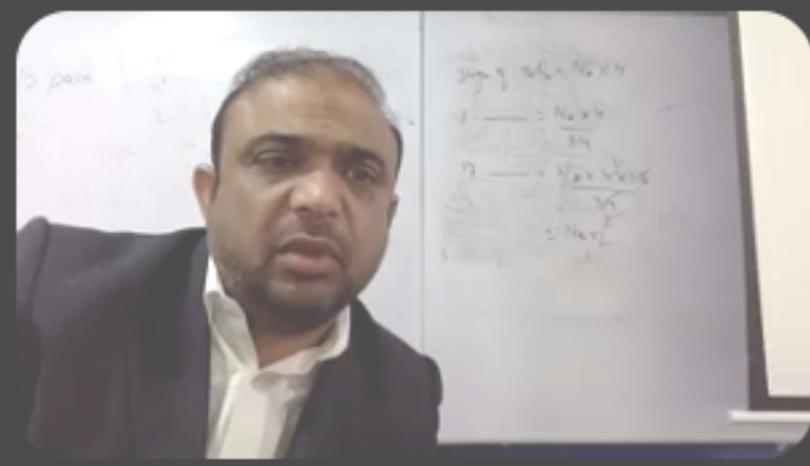
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26.

For those compounds which have same molecular and empirical formula, the value of simple multiple 'n' is?

- a. 2
- b. 4
- c. 1
- d. 3

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27.

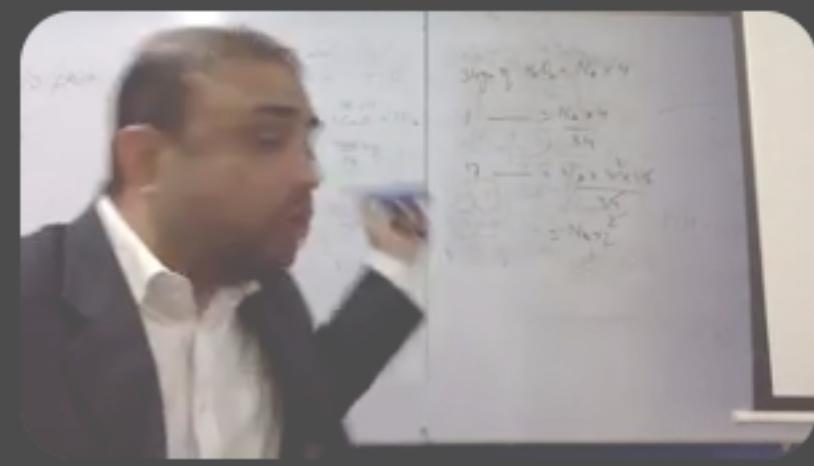
The value of simple multiple 'n' is:

- a. The ratio of atomic mass and molecular mass
- b. The ratio of molecular mass and empirical mass
- c. The ratio of empirical mass and molecular mass
- d. The ratio of molecular mass and atomic mass

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28.

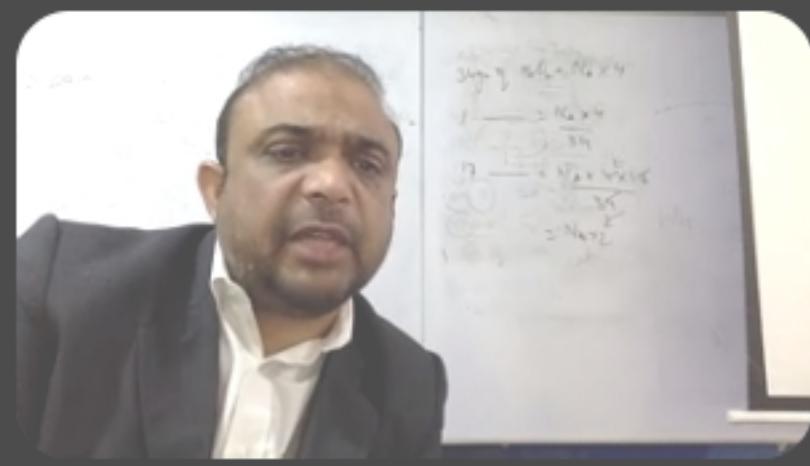
One gram molecular mass of different substances expressed in grams must possess:

- a. Have different masses in them
- b. have same masses in them
- c. Some times same masses and some times different masses in them
- d. All given above

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29.

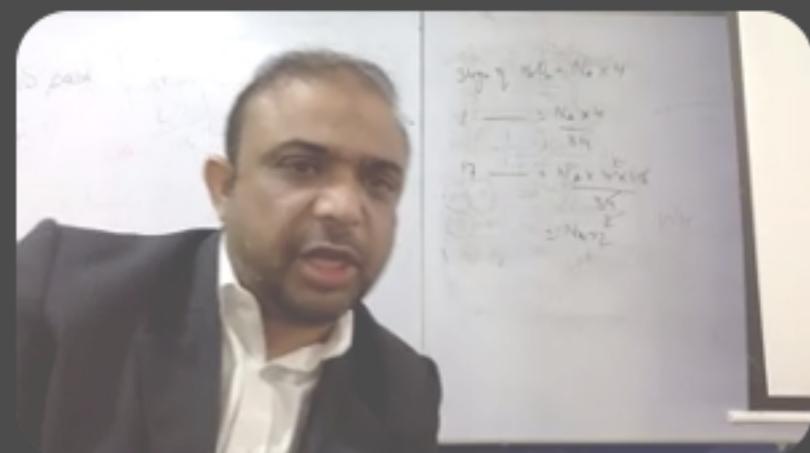
One mole of different compounds has:

- A) different masses and different number of molecules
- B) same masses but different number of molecules
- C) different masses but same number of molecules
- D) same masses as well as same number of molecules

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30.

Which one of the following statement is not true about molecule?

- a. molecule can exist independently
- b. molecule is the largest particle of a pure substance
- c. molecule always consist of more than one atoms
- d. molecular size depends on number of atoms and shape of molecule

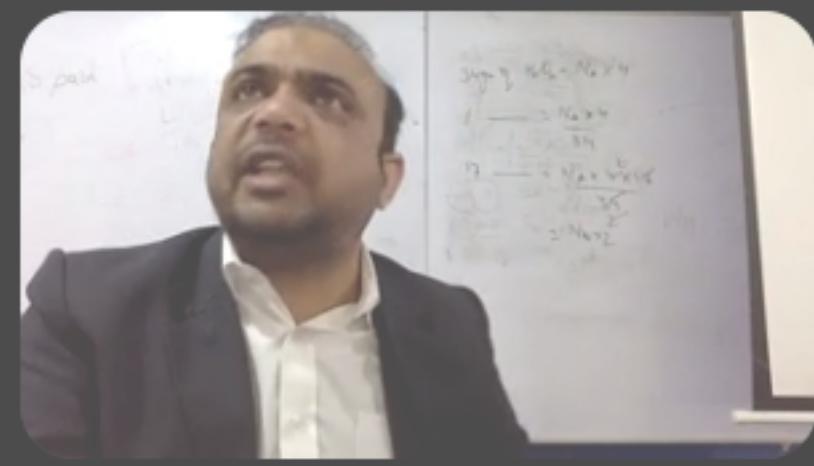
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31.

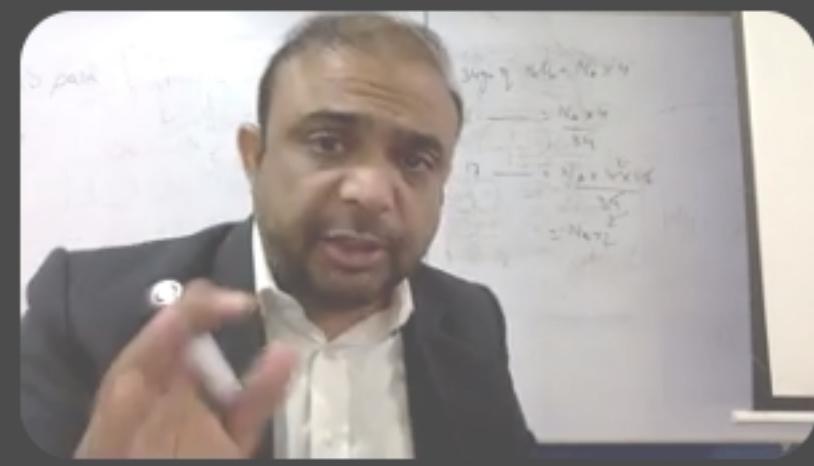
Molar volumes is 22.414 dm^3 it is true:

- a. only when the gas is ideal
- b. only when the gas is non-ideal
- c. for ideal gas as well as for non-ideal gas
- d. sometimes true for ideal gas and some time true for non-ideal gas

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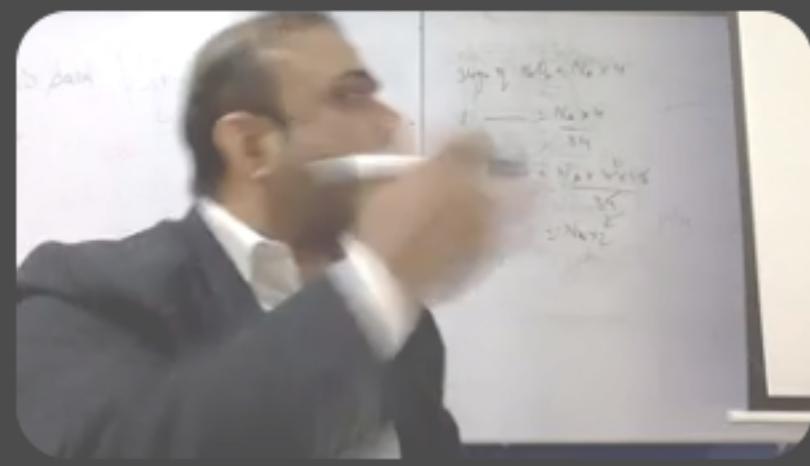


32.

One mole of an ideal gas at room temperature and pressure (r.t.p.) occupies a volume of:

- a. $22dm^3$
- c. $24dm^3$
- b. $20dm^3$
- d. $26dm^3$

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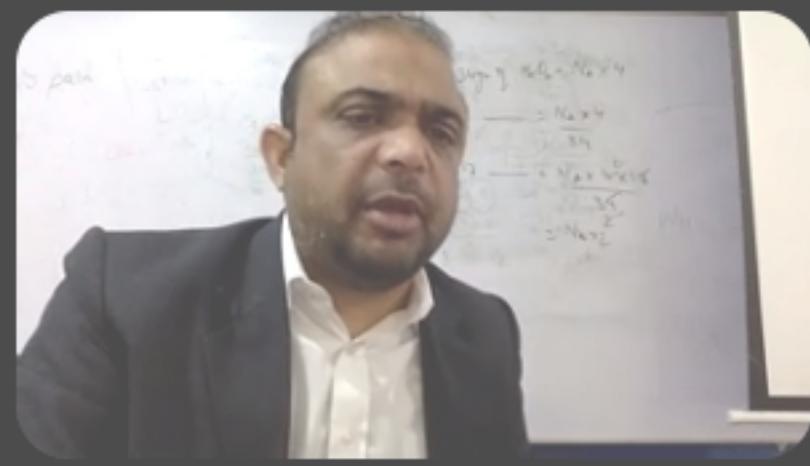


33.

414 dm³ of each gas at STP has :

- a. a same mass and same numbers of molecules**
- b. a different mass and different numbers of molecules**
- c. a different mass but the same number of molecules**
- d. a same mass but different number of molecules**

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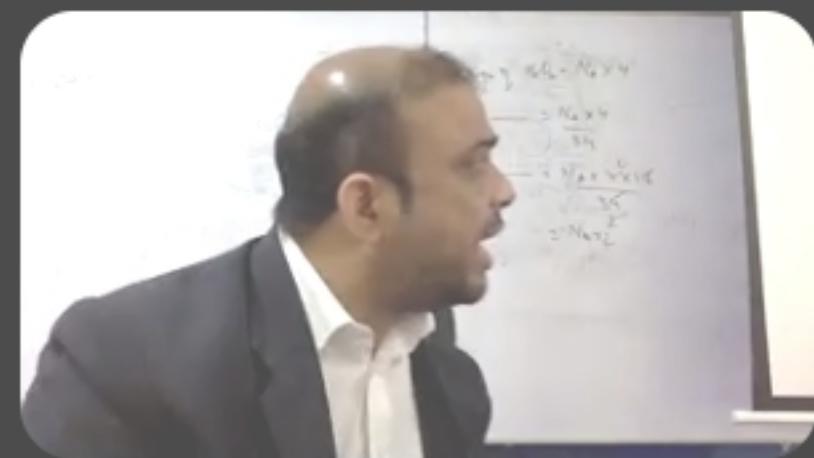
34.

Many elements have fractional atomic masses.

This is because:

- a. The mass of the atom is itself fractional
- b. Atomic masses are average masses of isobars
- c. Atomic masses are average masses of isotopes
- d. Atomic masses are average masses of isotopes proportion to their relative abundance

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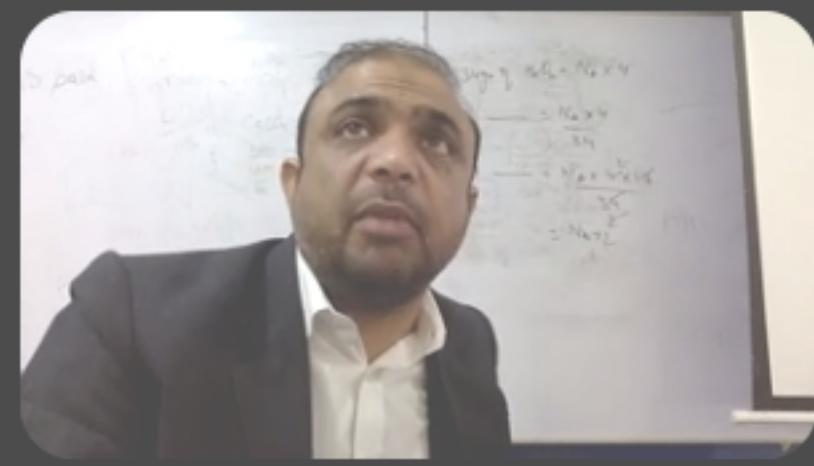


35.

For a reaction $X + 2Y \longrightarrow Z$. The amount of Z formed by starting the reaction with 5 moles of X and 8 moles of Y:

- A) 5 moles
- B) 8 moles
- C) 16 moles
- D) 4 moles

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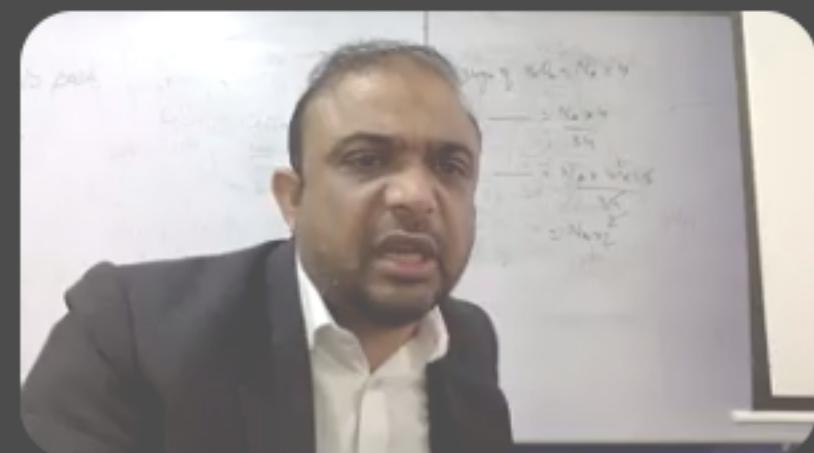


36.

One mole of water and one mole of methane have an equal:

- A) mass
- B) number of atoms
- C) number of molecules
- D) number of formula units

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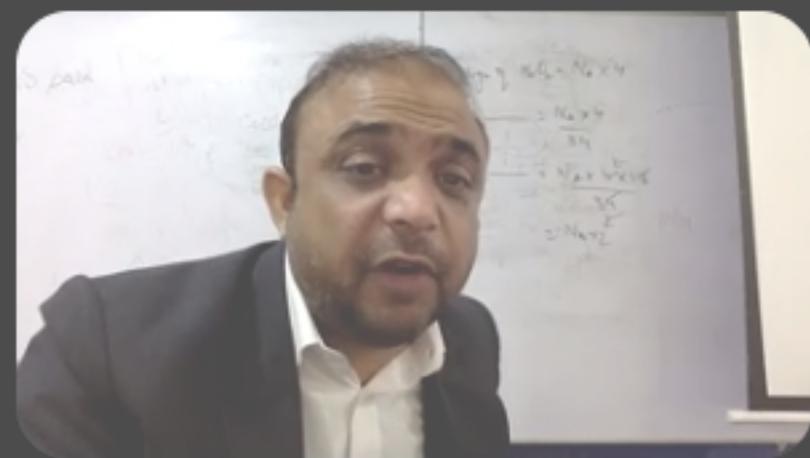


37.

A compound has an empirical formula CH_2Cl , and molecular formula mass as 99g mol^{-1} , identify the compound,

- A) $\text{C}_2\text{H}_5\text{Cl}$
- B) $\text{C}_4\text{H}_8\text{Cl}$
- C) $\text{C}_2\text{H}_4\text{Cl}_2$
- D) $\text{C}_2\text{H}_3\text{Cl}_3$

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38.

The Avogadro's Number is the number of:

- a. numbers of the molecules of H_2 in 1 gram
- b. number of the molecules of CO_2 in 44 grams
- c. number of atoms in CO_2 in 44 grams
- d. number of oxygen atoms in CO_2 in 44 grams

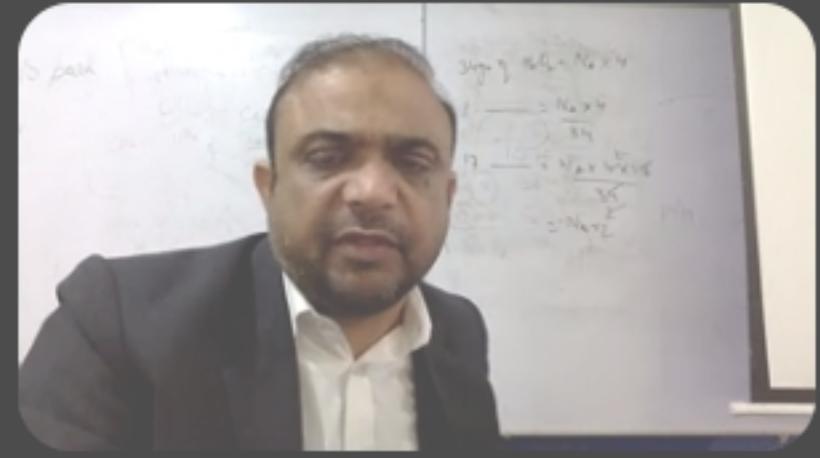
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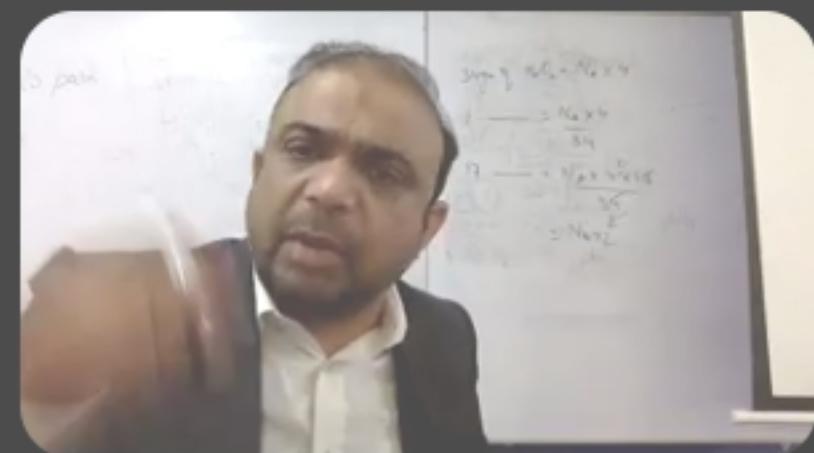


39.

The empirical formula of a compound is CH_2O . What other information is needed to determine its molecular formula?

- a. %age composition of each element in compound
 - b. density of the compound
 - c. relative molecular mass of the compound
 - d. boiling point of the compound

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40.

100g of $CaCO_3$ is decomposed, the CO_2 produced occupies a volume at STP.

- a. 2.2414 dm^3
- b. 22.414 dm^3
- c. 22414 dm^3
- d. 224014 dm^3

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